

Notice of Meeting

Climate Change and Resource Recovery Advisory Committee Meeting

A Climate Change and Resource Recovery Advisory Committee Meeting of Byron Shire Council will be held as follows:

Venue	Conference Room, Station Street, Mullumbimby
Date	Thursday, 29 June 2023
Time	2.00pm

Shannon Burt
Director Sustainable Environment and Economy

I2023/964
Distributed 20/06/23



BYRON
SHIRE
COUNCIL

CONFLICT OF INTERESTS

What is a “Conflict of Interests” - A conflict of interests can be of two types:

Pecuniary - an interest that a person has in a matter because of a reasonable likelihood or expectation of appreciable financial gain or loss to the person or another person with whom the person is associated.

Non-pecuniary – a private or personal interest that a Council official has that does not amount to a pecuniary interest as defined in the Code of Conduct for Councillors (eg. A friendship, membership of an association, society or trade union or involvement or interest in an activity and may include an interest of a financial nature).

Remoteness – a person does not have a pecuniary interest in a matter if the interest is so remote or insignificant that it could not reasonably be regarded as likely to influence any decision the person might make in relation to a matter or if the interest is of a kind specified in the Code of Conduct for Councillors.

Who has a Pecuniary Interest? - a person has a pecuniary interest in a matter if the pecuniary interest is the interest of the person, or another person with whom the person is associated (see below).

Relatives, Partners - a person is taken to have a pecuniary interest in a matter if:

- The person’s spouse or de facto partner or a relative of the person has a pecuniary interest in the matter, or
- The person, or a nominee, partners or employer of the person, is a member of a company or other body that has a pecuniary interest in the matter.

N.B. “Relative”, in relation to a person means any of the following:

- (a) the parent, grandparent, brother, sister, uncle, aunt, nephew, niece, lineal descends or adopted child of the person or of the person’s spouse;
- (b) the spouse or de facto partners of the person or of a person referred to in paragraph (a)

No Interest in the Matter - however, a person is not taken to have a pecuniary interest in a matter:

- If the person is unaware of the relevant pecuniary interest of the spouse, de facto partner, relative or company or other body, or
- Just because the person is a member of, or is employed by, the Council.
- Just because the person is a member of, or a delegate of the Council to, a company or other body that has a pecuniary interest in the matter provided that the person has no beneficial interest in any shares of the company or body.

Disclosure and participation in meetings

- A Councillor or a member of a Council Committee who has a pecuniary interest in any matter with which the Council is concerned and who is present at a meeting of the Council or Committee at which the matter is being considered must disclose the nature of the interest to the meeting as soon as practicable.
- The Councillor or member must not be present at, or in sight of, the meeting of the Council or Committee:
 - (a) at any time during which the matter is being considered or discussed by the Council or Committee, or

- (b) at any time during which the Council or Committee is voting on any question in relation to the matter.

No Knowledge - a person does not breach this Clause if the person did not know and could not reasonably be expected to have known that the matter under consideration at the meeting was a matter in which he or she had a pecuniary interest.

Non-pecuniary Interests - Must be disclosed in meetings.

There are a broad range of options available for managing conflicts & the option chosen will depend on an assessment of the circumstances of the matter, the nature of the interest and the significance of the issue being dealt with. Non-pecuniary conflicts of interests must be dealt with in at least one of the following ways:

- It may be appropriate that no action be taken where the potential for conflict is minimal. However, Councillors should consider providing an explanation of why they consider a conflict does not exist.
- Limit involvement if practical (eg. Participate in discussion but not in decision making or vice-versa). Care needs to be taken when exercising this option.
- Remove the source of the conflict (eg. Relinquishing or divesting the personal interest that creates the conflict)
- Have no involvement by absenting yourself from and not taking part in any debate or voting on the issue as of the provisions in the Code of Conduct (particularly if you have a significant non-pecuniary interest)

Committee members are reminded that they should declare and manage all conflicts of interest in respect of any matter on this Agenda, in accordance with the [Code of Conduct](#).

RECORDING OF VOTING ON PLANNING MATTERS

Clause 375A of the Local Government Act 1993 – Recording of voting on planning matters

- (1) In this section, **planning decision** means a decision made in the exercise of a function of a council under the Environmental Planning and Assessment Act 1979:
- (a) including a decision relating to a development application, an environmental planning instrument, a development control plan or a development contribution plan under that Act, but
- (b) not including the making of an order under that Act.
- (2) The general manager is required to keep a register containing, for each planning decision made at a meeting of the council or a council committee, the names of the councillors who supported the decision and the names of any councillors who opposed (or are taken to have opposed) the decision.
- (3) For the purpose of maintaining the register, a division is required to be called whenever a motion for a planning decision is put at a meeting of the council or a council committee.
- (4) Each decision recorded in the register is to be described in the register or identified in a manner that enables the description to be obtained from another publicly available document and is to include the information required by the regulations.
- (5) This section extends to a meeting that is closed to the public.

OATH AND AFFIRMATION FOR COUNCILLORS

Councillors are reminded of the oath of office or affirmation of office made at or before their first meeting of the council in accordance with Clause 233A of the Local Government Act 1993. This includes undertaking the duties of the office of councillor in the best interests of the people of Byron Shire and the Byron Shire Council and faithfully and impartially carrying out the functions, powers, authorities and discretions vested under the Act or any other Act to the best of one's ability and judgment.

BYRON SHIRE COUNCIL

BUSINESS OF MEETING

1. APOLOGIES

2. DECLARATIONS OF INTEREST – PECUNIARY AND NON-PECUNIARY

3. ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

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ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

Report No. 3.1 Confirmation of minutes from the 18 May 2023 meeting


5 **Directorate:** Sustainable Environment and Economy
Report Author: Michelle Wilde, Project Support Officer
File No: I2023/807

10

RECOMMENDATION:

That the minutes of the Climate Change and Resource Recovery Advisory Committee Meeting held on 18 May 2023 be confirmed.

15 **Attachments:**

1 Minutes 18/05/2023 Climate Change and Resource Recovery Advisory Committee, I2023/739 , page 8 [↓](#) 

20

BYRON SHIRE COUNCIL

ADOPTION OF MINUTES FROM PREVIOUS MEETINGS

3.1

Report

The attachment to this report provides the minutes of the Climate Change and Resource Recovery Advisory Committee Meeting of 18 May 2023 .

Report to Council

- 5 The minutes were reported to Council on 22 June 2023.

Comments

Upon authorisation of this report the 22 June Council meeting had not yet taken place.

STAFF REPORTS - SUSTAINABLE ENVIRONMENT AND ECONOMY

Report No. 4.1 Future Discussion Items for Climate Change and Resource Recovery Advisory Committee

5

Directorate: Sustainable Environment and Economy

Report Author: Julia Adams, Sustainability Team Leader

File No: I2023/727

Summary:

10 This report summarises reports and information requested by the Climate Change and Resource Recovery Advisory Committee. These requests, resourcing and alignment with Council's Operational Plan are tabled for discussion by the committee, to resolve whether these requests are taken to Council for consideration for inclusion in a future Council OP and budget.

15

RECOMMENDATION:

20 **That the Climate Change and Resource Recovery Advisory Committee notes the report.**

Report

The following requests for reports or information have been received by Climate Change and Resource Recovery Advisory Committee members:

Information requested	Resourcing	Operational Plan & other Council Strategies
<p>That a potential demonstration house at Bangalow Heritage House be discussed at a future meeting.</p> <p>Requested by:</p> <p>Sasha Mainsbridge</p>	<p>The Leasing and Cultural Planning teams are currently preparing information for interested parties.</p> <p>Staff will be able to provide a detailed response at the following CCRRAC meeting in September.</p> <p>No budget is currently allocated to this activity.</p>	<p>Whilst there is no activity in Council’s OP that directly resource this proposal, the following actions provide indirect support:</p> <p>OP activity 3.2.4 – Sustainability projects – support community led environmental and sustainability projects</p> <p>OP activity 3.4.2 – Climate change adaptation – enhance community resilience and ability to adapt before, during, and after climate events</p> <p>OP activity 3.4.4 – Net Zero – work towards achieving Council’s 100% net zero-emissions target</p>
<p>Mullum Cares is embarking on a collaboration with Global Ripple Op Shop to be discussed at a future meeting.</p> <p>Requested by:</p> <p>Sasha Mainsbridge</p>	<p>Recommend that this item be included in the next available meeting’s agenda for Sasha Mainsbridge to provide a 10-minute presentation on the Mullum Cares and Global Ripple Op Shop project. This can be listed in the next meetings ‘Sustainability projects update’ report to enable the discussion and will not require a standalone report.</p>	<p>Whilst there is no activity in Council’s OP that directly resources this proposal, the following actions provide indirect support:</p> <p>OP activity 3.2.4 – Sustainability projects – support community led environmental and sustainability projects</p> <p>Delivery Plan action 3.5 – Minimise waste and encourage recycling and</p>

Information requested	Resourcing	Operational Plan & other Council Strategies
		resource recovery practices.

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
1: Effective Leadership We have effective decision making and community leadership that is open and informed	1.2: Engage and involve community in decision making	1.2.4: Advisory Committees - Coordinate advisory committees to inform decision making on their areas of expertise	1.2.4.1	Coordinate and support Advisory Committees to assist with effective Council decision making
3: Nurtured Environment We nurture and enhance the natural environment	3.4: Support and empower our community to adapt to, and mitigate our impact on climate change	3.4.4: Net Zero - Work towards achieving Council's 100% net zero-emissions target	3.4.4.2	Participate in regional sustainability working groups and initiatives.

Recent Resolutions

N/A

5 Legal/Statutory/Policy Considerations

N/A

Financial Considerations

No detailed costings for requested items provided at this stage.

Consultation and Engagement

10 N/A

Report No. 4.2 Regional Waste Strategy and Waste to Energy

Directorate: Infrastructure Services

Report Author: Danielle Hanigan, Manager Resource Recovery

5 **File No:** I2023/806

Summary:

10 The Report provides the Committee with an overview of Councils involvement in the North Coast Waste Investment Review Project, Richmond Valley Councils Jobs Precinct and Energy from Waste investigations and how these activities relate to relevant strategies Council is working under to reduce waste, increase resource recovery and manage residual waste.

Council's relationships with other Northern Rivers Councils in relation to regional waste management is also detailed, highlighting the importance of collaboration with our neighbouring Councils.

15 The report provides response to questions raised at the March 2023 CCRRAC meeting which sought information on the following;

- the formal relationship between our Shire and the group of Shires.
- our current waste strategies in relation to incineration as a Shire and within the group.
- 20 • Status on the proposed waste to energy plant at Casino including the positions of the other councils within North East Waste and the State Government post-election.
- consideration of a motion of no support for an incinerator (waste to energy) project in the region.

RECOMMENDATION:

- 5 **That the Climate Change and Resource Recovery Advisory Committee:**
1. **Notes the report;**
 2. **Supports maintaining an open, investigative approach to long term waste management, including alternative waste treatment, ensuring options are assessed transparently to ensure the best outcome for the environment and our communities; and.**
 3. **Is updated on regional waste management initiatives and any progression or changes in energy from waste status locally or at a State level as part of the Resource Recovery Update report provided to this Committee each meeting.**

10

15

Report

a) To get a report on the formal relationship between our Shire and the group of Shires.

5 Byron Shire Council works with neighbouring Councils through formal and informal relationships on a range of issues. In many cases, partnering with other Councils and sharing information can result in much better outcomes for our communities. This can be particularly prevalent in waste management where economies of scale, and the challenges faced in transportation in regional areas can be overcome through collaboration and regional projects. This is reflected in Council's Towards Zero: Byron Shire's Integrated
10 Waste Management and Resource Recovery Strategy 2019-2029 (Towards Zero Strategy)

Objective 4 Lobbying for Policy Reform - Actively participate in all relevant NJRO and NEWaste actions and consultations.

Relationships that Byron Shire Council has with other Councils which may effect waste management are as follows;

15 **North East Waste (NEW)**

A group of councils on the North Coast of New South Wales, working together towards cost-effective waste management solutions. The group has a voluntary membership, and aims to achieve the development and implementation of local and regionally based solutions to waste management.

20 The member councils include Ballina Shire, Byron Shire, Clarence Valley, Lismore City, Kyogle, Richmond Valley and Tweed Shire. North East Waste is a member group of RENEW NSW and is supported / funded by its member Councils and the NSW Environmental Protection Agency (EPA). The group operates under a Memorandum of Understanding and Council contributes approximately \$32,000 in annual membership.

25 Continued membership and participation in North East Waste is a recurring action within Councils adopted Operational Plan, and Towards Zero Strategy, with meetings attended on a quarterly basis.

Northern Rivers Joint Organisation (NRJO)

30 The Northern Rivers Joint Organisation (NRJO) represents the Ballina, Byron, Clarence Valley, Kyogle, Lismore, Richmond Valley and Tweed NSW local government areas.

With representation by the Mayors and General Managers of each Council, NRJO's role is to facilitate and lead advocacy, political representation and cooperative action on matters of regional significance.

35 The NRJO's Strategic Regional Priorities identifies *Innovative, sustainable energy, water and waste management* as one of the 5 regional priorities for the region.

North Coast Waste Investment Review Project – Steering Group

5 Byron Shire Council is one of 13 Councils in the NSW North Coast region participating in the North Coast Waste Investment Review Project which commenced in 2019. This is an informal, voluntary group, devised to drive a specific project. The Project has considered options to develop regional responses to collective waste challenges, including infrastructure to divert residual waste (the waste left after resource recovery and recycling) from landfill, to enhance resource recovery rates and to support the security and local opportunity of the recovered materials supply chain through to end markets.

10 The Project has been driven by Richmond Valley Council with support and expertise from Resource Recovery and Waste staff and General Managers from all participating Councils. This has included all NEW member Councils as well as additional Councils across the North Coast region. Participation in this project is in accordance with Councils adopted *Towards Zero Strategy*, and included commitment to provide information on waste streams, and to investigate possible solutions through a Market Sounding and Expression of Interest activity.

- 15 • *Towards Zero Strategy Key Goal: determine the feasibility of pursuing a regional Alternative Waste Treatment (AWT) Solution.*
- 20 • *Delivery Plan and Operational Plan Activity 3.5.3.2: Support the progression of a regional; alternative waste treatment facility in alignment of the adopted strategy and relevant resolutions.*

b) A report on our current waste strategies in relation to incineration as a Shire and within the group.

25 Council works under a number of strategic documents, policies and regulations at a Local, Regional, State and Federal level. These guiding documents help to determine the pathway that we as an organisation take in best practice waste management and environmental protection and provides support for future planning and investment.

Federal: National Waste Policy Action Plan *link below*

30 **State:** The NSW Waste and Sustainable Materials Strategy (WASM) *link below*

35 This is the key overarching strategic document that guides State and Local Government through setting direction, waste reduction targets and providing funding programs to assist in the delivery of projects and strategic outcomes. The WASM has shifted the focus from managing waste in a linear manner at the end of its life cycle to looking at the design and manufacture of materials and how we can reduce and eliminate waste through keeping things in circulation, moving NSW to a circular economy model. The WASM also discusses the role of energy from waste as a necessary residual waste treatment as follows;

5 *Recovering energy from waste can be a legitimate and necessary residual waste management option where it can deliver positive outcomes for the community and the environment and assist in lowering our carbon footprint and reducing the need for landfill. Energy recovery can reduce emissions by replacing more carbon-intensive fuels and by stopping harmful methane emissions from materials in landfill.*

We want to support energy recovery where it makes sense to do so and where it is used to manage residual waste, not as an alternative to recycling.

10 *Thermal energy from waste facilities are the most common technology. These generate some electricity as well as heat and steam. Other types of energy recovery include anaerobic digestion.*

NSW Energy from Waste Policy Statement: Supporting the WASM, the NSW EPA has also released the *NSW Energy from Waste Policy Statement* (Policy Statement) which aims to apply the following overarching principles to waste avoidance and recovery:

- higher value resource recovery outcomes are maximised
- 15 • air quality and human health are protected
- ‘mass burn’ disposal outcomes are avoided
- scope is provided for industry innovation

20 The Policy Statement states that *incineration facilities for the destruction of waste* as a thermal treatment application are excluded from the Policy as they are not considered to be undertaking genuine energy recovery. This means that incineration is not permitted under this Policy Statement as an energy from waste activity.

Under the Policy, proposals must:

- Meet current international best practice techniques, including emissions controls
- 25 • Use technologies that are proven, well understood and capable of handling the waste inputs
- Meet technical, thermal efficiency and resource recovery criteria
- Undertake monitoring with real-time feedback.

30 Furthermore, such facilities will only be supported where they are used to manage residual waste, not as an alternative to recycling.

NSW Energy from Waste Infrastructure Plan and POEO Regulation

35 The NSW Energy from Waste Infrastructure Plan and subsequent *Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022* put into law the Government’s *Energy from Waste Infrastructure Plan* to strategically locate energy from waste facilities in four designated locations in NSW in a bid to maximise efficiencies in infrastructure, waste management, innovation and energy recovery. The Richmond Valley Regional Job Precinct has been identified as one of these four locations along with West Lithgow Precinct, Parkes Activation Precinct, and Southern Goulburn-Mulwaree Precinct.

Regional: NE Waste Regional Waste Strategy 2022-2027

A high level regional strategy that includes actions at a regional level to assist in achieving the targets and objectives of the WASM. The associated annual action plan is currently under development. Strategy is attached E2023/43984.

5 **Byron Shire Council:** Towards Zero: Byron Shire's Integrated Waste Management and Resource Recovery Strategy 2019-2029

Councils adopted *Towards Zero Strategy* is guided by the principles of the waste hierarchy and a circular economy model. This means that everything we do is aimed at avoiding, reducing, reusing, recycling and keeping materials in circulation through improved product design and manufacture, and allowing innovation to create systems that allow this to occur. The Strategy also encompasses objectives relating to the investigation of Alternative Waste Treatment (AWT) as a means to manage residual waste as an alternative to landfilling. Development of the Strategy included high level assessment of AWT technologies including combustion, gasification and mechanical biological treatment. Specific actions within the Strategy that address AWT are highlighted below;

Objective 2: Solutions for Residual Waste

Key Goal: By 2020, determine the feasibility of pursuing a regional AWT solution

This directs the work that has been undertaken to date as part of the North Coast Waste Investment Review Project.

20 *Objective 4 : Lobbying for Policy Reform*

Key Goal: Actively participate in all relevant NJRO and NE Waste actions and consultations

- *Engage the NSW and Federal governments to advocate bigger picture policy review and reform, aligned with BSC strategic objectives*
- 25 • *Clear policy and guidelines on Energy-from-Waste developments*

There is no objective, goal, or action that mentions incineration within the *Towards Zero: Byron Shire's Integrated Waste Management and Resource Recovery Strategy 2019-2029*.

Investigation of AWT and energy from waste technologies is a strategy to manage waste after all other steps within the waste hierarchy are taken. As an alternative to landfilling, and a renewable energy source there may be new technologies emerge that prove to deliver better environmental and financial outcomes. Landfill generates 50% of Councils emissions, despite the landfill being out of operation since 2015, and with Councils commitment to net zero emissions, the generation and management of waste will play a vital role in emissions reduction.

Byron Shire Council Community Strategic Plan, Delivery Plan and Operational Plan

5 A number of key goals in the Community Strategic Plan and actions within the Operational Plan relate to the issues addressed in this report. These are highlighted in the **Strategic Consideration** section of this report.

c) A status report on the proposed waste to energy plant at Casino including the positions of the other councils within North East Waste and the State Government post-election.

10 The status report at the November 2022 CCRRAC Meeting (I2022/1474 attached), provided an overview of the North Coast Waste Investment Review Project and how this has coincided with the release of NSW Energy from Waste Policy, Plan and Regulation.

In brief, the stages of the project have been as follows:

- Waste Stocktake analysis (Arcadis Consultants)
- 15 • North Coast Regional Waste Investment Review Project Report (Arcadis Consultants)
- Market Sounding and Expression of Interest (Mike Richie and Associates Consultants)

Update - Expression of Interest

20 In mid-2022, Richmond Valley Council (RVC) on behalf of nine Councils on the North Coast sought Expressions of Interest (EoI) from the waste management industry to provide long term alternative waste treatment infrastructure in the North Coast region. The EoI sought solutions for processing residual waste, recyclates and organics (food and garden).

25 Sixteen submissions were received, covering a range of technologies for various waste streams including;

- 1) thermal treatment of residual waste via
 - moving grate
 - fluidised bed
 - 30 • gasification
 - pyrolysis
 - autoclaving

- 2) processing organic waste via
- in vessel composting
 - anaerobic digestion
- 3) separation of co-mingled recyclables
- 5 • material recovery facilities

The EoI process demonstrated that there was interest in establishing facilities in the region, and that those dealing with organics and recyclables could be further pursued. Options to deal with residual waste streams given the volumes in the region would be reliant on new technologies that would need to be proven for a minimum of two years before seeking any approvals from the EPA.

Status of Energy from Waste in Casino – Richmond Valley Council

Following the EOI process, and owing to the impacts of the Energy from Waste Regulation, Richmond Valley Council provided a report to their November 2022 Council Meeting recommending that they resolve a position that Council:

- 15 • *Pauses its active investigation into an Energy from Waste facility for the Richmond Valley while the Parkes Special Activation Precinct EfW proposal proceeds and monitors progress, community reactions and outcomes;*
- 20 • *Continues to consider other options in the Alternative Waste Treatment Solutions Expression of Interest responses and keep North Coast Councils updated on any progress and opportunities for collaboration.*

The full Council Report is attached (E2023/43992).

RVC has provided a public statement as follows:

BYRON SHIRE COUNCIL

STAFF REPORTS – INFRASTRUCTURE SERVICES

4.2

Statement on energy-to-waste: *Richmond Valley Council has been working with other North Coast councils to help resolve regional waste management issues and find a better solution to landfill.*

5 *The recent expressions of interest process, conducted by RVC in conjunction with other coastal councils, confirmed the level of interest in establishing alternative waste treatment facilities, but also highlighted the challenges of navigating government policy and regulation to deliver these solutions in an appropriate manner.*

10 *Council has previously expressed its disappointment with the way the NSW Government's Energy from Waste Regulation has been drafted. As a result, Council resolved in November to pause its investigation into an energy-from-waste facility in the Richmond Valley until such time as these matters become clearer.*

In keeping with Council's resolution, and recognising that there is no development proposal for such a facility in the Richmond Valley, no further media comment will be issued regarding this matter.

15 *In the meantime, Council will continue to explore other options for waste management, including recycling and repurposing industries.*

20 RVC has advised that Lithgow has been revoked as one of the four locations within the EfW Infrastructure Plan, however no further information is known as to why or how this has occurred. RVC has confirmed that there has been no change the November Council resolution and the statement above. They have paused awaiting further direction and support from the State Government, and to see what happens with the Parkes Project, which currently looks uncertain. No changes are known to have occurred to any of the NSW strategy following the NSW State election at this point in time.

25 Other North East Waste Councils have provided the following as to their position on Energy from Waste.

Tweed Shire Council

Tweed Shire Council does not currently have a formal position on waste to energy.

30 Tweed Shire Council's Towards Zero Waste Strategy does recognise that to achieve 90% diversion of waste from landfill that some form of Alternative Waste Treatment may be required and includes *Strategic Objective 3.5: By June 2025, we will establish a Council position statement on an 'energy from waste' treatment solution for landfill bound waste.*

Kyogle Council

Kyogle Council doesn't have a formal position on waste to energy.

Lismore City Council

35 Lismore City Council's Resource Recovery and Residual Waste Strategy 2022-2032 - Key Theme 3: Determining Solutions for residual Wastes Items 6.2 Investigate different technologies and by-products (excluding residual waste to energy by incineration)

Item 6.3 Lismore City Council does not support waste to energy from residual waste stream incineration in the Northern Rivers.

This followed the below Council resolution:

97/21	On submission to the meeting the motion was RESOLVED that the:
	<ol style="list-style-type: none">1. draft 2022-32 Resource Recovery and Residual Waste Strategy: Sharing the Responsibility towards a Circular Economy and Resourceful Community be placed on public exhibition for a period of at least 28 days.2. draft strategy be reported back to Council by April 2022.3. Council opposes the Waste to Energy proposal and exclude it from the strategy.
	(Councillors Guise/Lloyd) (BP21/821)
Voting for:	Councillors Bird, Casson, Cook, Ekins, Guise and Lloyd
Voting against:	Councillors Marks and Moorhouse

5 The Strategy was adopted after the exhibition period.

Clarence Valley Council

Clarence Valley Council doesn't have a formal position on waste to energy.

Ballina Shire Council

10 Does not have a waste strategy and has provided no response as to their status on waste to energy.

d) To consider a motion of no support for an incinerator (waste to energy) project in the region.

15 As detailed within the *NSW Waste and Sustainable Materials Strategy* and associated *NSW Energy from Waste Policy Statement, Infrastructure Plan and Regulation*, under the Policy, proposals must:

- Meet current international best practice techniques, including emissions controls
- Use technologies that are proven, well understood and capable of handling the waste inputs
- Meet technical, thermal efficiency and resource recovery criteria
- Undertake monitoring with real-time feedback.

Furthermore, such facilities will only be supported where they are used to manage residual waste, not as an alternative to recycling.

25 The Policy states that *incineration facilities for the destruction of waste* as a thermal treatment application are excluded from the Policy as they are not considered to be undertaking genuine energy recovery. This means that incineration is not permitted under this Policy Statement, and therefore a motion of no support for an incinerator is non-consequential in this instance, as they are already not supported by the Regulator.

Council should maintain an open, investigative approach to long term waste management, assessing all options, particularly in an environment where new technologies are emerging

and innovation is supported. The environmental impact of landfilling as well as the generation of electricity from non-renewable sources should be assessed against new technologies as they emerge to ensure we can provide the best outcome for our environment and our communities. Progression and increased support for circular economy, resource recovery and diversion and avoidance of waste generation should all take priority, as investment in these areas will ultimately reduce our overall need for alternative waste treatment or landfilling.

Strategic Considerations

10 Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.1: Waste management and resource recovery strategy - Implement Integrated Waste Management and Resource Recovery Strategy - Towards Zero	3.5.1.1	Maintain membership and participation in the North East Waste regional waste management group
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.3: Waste collection and landfill - Maintain and enhance solutions to recover / treat / dispose of residual waste	3.5.3.1	Maintain and manage Waste and Resource Recovery Collection, processing and disposal contracts
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery	3.5.3: Waste collection and landfill - Maintain and enhance solutions to	3.5.3.2	Support the progression of a regional; alternative waste treatment facility in alignment of the adopted strategy

BYRON SHIRE COUNCIL

STAFF REPORTS – INFRASTRUCTURE SERVICES

4.2

	practices	recover / treat / dispose of residual waste		and relevant resolutions
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.4: Education - Empower the community to increase avoidance, reuse, and recycling activities	3.5.4.3	Develop and support community based sustainability and circular economy initiatives

Legal/Statutory/Policy Considerations

[National Waste Policy Action Plan 2019 \(dcceew.gov.au\)](https://www.dcceew.gov.au/water/publications/national-waste-policy-action-plan-2019)

[NSW Waste and Sustainable Materials Strategy 2041](#)

5 [NSW Energy from Waste Policy Statement](#)

[Energy from Waste Infrastructure Plan \(nsw.gov.au\)](https://www.nsw.gov.au/energy-and-minerals/energy-from-waste/energy-from-waste-infrastructure-plan)

[Towards Zero Integrated Waste Strategy 2019 to 2029 - Byron Shire Council \(nsw.gov.au\)](#)

10

Report No. 4.3 Draft Single-use Packaging and Materials Policy

Directorate: Sustainable Environment and Economy

Report Author: Danielle Hanigan, Manager Resource Recovery

5 **File No:** I2023/549

Summary:

10 The Draft Single-use Packaging and Materials Policy aims to support the delivery of key projects and programs within the *Towards Zero: Integrated Waste Management and Resource Recovery Strategy*. Through the Policy, we will reduce single-use materials, create the necessary support for circular industries to develop reuse systems to replace single-use, throwaway packaging. The Policy aims to balance ambition with practicality, and will be supported with guidelines, resources and investment in the necessary infrastructure to support Council operations, community organisations and events to transition away from single-use packaging and materials. Through endorsement of a
15 Policy such as this in areas under Council’s control, there will be a flow on effect into the business and broader community.


20 This report seeks feedback and endorsement from the Climate Change and Resource Recovery Advisory Committee on the attached Draft Single-use Packaging and Materials Policy, Attachment 1 (E2023/51809), noting its implications for Council operations and the broader community.

25

RECOMMENDATION:

That the Climate Change and Resource Recovery Advisory Committee notes the report and attachment.

30 **Attachments:**

1 DRAFT Single-use Packaging and Materials Policy 2023 - May 2023, E2023/51809 , page 33 

35

Report

5 The *Draft Single-use Packaging and Materials Policy 2023* upholds Byron Shire Council's commitment to reducing the consumption of products from non-renewable resources and protecting our natural environment. This Policy outlines the principles and decision-making framework for Council, the community and businesses to phase out single-use and disposable materials in all Council business, on Council owned and managed lands, and in Council buildings and facilities.

The Policy aims to:

- 10 • Reduce single-use plastic pollution on our beaches, open spaces, road reserves and waterways
- Mitigate impacts to our natural environment and wildlife caused by litter
- Reduce carbon emissions caused by producing, transporting, recycling and disposing of single-use materials
- Preserve natural resources and reduce the need to mine raw materials
- 15 • Minimise valuable resources going to landfill
- Increase community pride and encourage leadership in environmental stewardship
- Work to change behaviour and normalise the use of reusables throughout our community
- 20 • Provide confidence for industry to invest in infrastructure to support circular economy initiatives
- Increase the sustainability of Council's internal practices and lead by example to achieve our goal of zero-waste to landfill by 2029
- Support State and Federal waste reduction targets

25 The Policy addresses items, packaging and materials that are intended to be disposable, through disallowing their use. This refers to items that are designed for a single use after which they are recycled or disposed of as solid waste. The Policy specifies a list of items that will not be able to be procured, used, sold or distributed as part of Council business, on Council owned and managed lands, and in Council buildings and facilities.

30 Single-use and takeaway packaging contributes to over 50% of the materials in our public place bins and there has been 40% increase in the amount of "takeaway" litter found in our environment and waterways over the past 4 years, whilst other litter categories have decreased. The cost of managing this stream falls largely on Council, and therefore our community. This includes items defined as "compostable" most of which cannot be
35 composted in industrial systems and generate emissions in their production, transport and disposal.

5 Many of these items could be easily replaced by a circular system whereby reusables are used, washed and redistributed indefinitely. A comprehensive life cycle assessment conducted by Upstream demonstrates that reuse achieves better outcomes over single-use in terms of water use, emissions, and cost to business with varying break-even points depending on the number of times an item is reused.

Based on the **waste hierarchy principles**, this Policy should prioritise reusables that are sourced locally and made from renewable resources with a low carbon footprint. This is in place of single-use products, which by their nature are manufactured to be used once, or for a short period of time before being disposed of.

10 Applying the waste hierarchy through this Policy involves:

1. Avoidance and refusal of single-use products
2. Preferencing reusable and washable alternatives
3. Repairing over replacement
4. Purchasing recycled content and recyclable materials



15 Through eliminating single-use materials and switching to reusable alternatives, Council will support a shift to a **Circular Economy**. This model has three key components

1. Products and materials are designed and manufactured in a way that eliminates waste and pollution
- 20 2. Products and materials are reused, repaired, repurposed, and kept in circulation
3. We regenerate natural systems through returning biodegradable materials to the earth

25 To support this Policy, Council's infrastructure (dishwashing facilities, grease traps, cutlery, crockery, serving ware etc will be audited to identify gaps and investment made where required.

30 Supporting guidelines to provide further information on why this Policy is required and how to implement it are being developed and will be provided to Council staff, community groups and event organisers alongside the Policy documentation. These guidelines will also outline alternatives to single-use items within the Policy to help guide individuals and groups in making the transition.

35 Resource Recovery staff will work with all stakeholders to support the transition away from single-use and help to set up systems that will be efficient and user friendly. Implementation will be supported by an extensive education campaign. It is acknowledged that the Policy will require a cultural shift from the linear throwaway one most are used to, and this will take a significant amount of effort and staff resource.

Several staff have been consulted on the Policy and there has been widespread support and useful feedback, which has helped in the Policy development.

Feedback is sought from Committee Members as part of this initial consultation phase.

5 Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.1: Waste management and resource recovery strategy - Implement Integrated Waste Management and Resource Recovery Strategy - Towards Zero	3.5.1.3	Improve management of Council generated waste
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.2: Recycling - Work with business and tourism sector to reduce waste to landfill	3.5.2.5	Develop and implement Zero Waste Event program
3: Nurtured Environment We nurture and enhance the natural environment	3.5: Minimise waste and encourage recycling and resource recovery practices	3.5.4: Education - Empower the community to increase avoidance, reuse, and recycling activities	3.5.4.3	Develop and support community based sustainability and circular economy initiatives

Legal/Statutory/Policy Considerations

As identified in Attachment 1.

Financial Considerations

Budgeted from waste reserve.

5 Consultation and Engagement

Several internal Council staff have been consulted on the Policy to date from across the organisation. Further consultation will be undertaken during the Policy development and exhibition periods including Section 355 Committees. This report forms part of the consultation with this Committee.

10

Report No. 4.4 Sustainability project updates

Directorate: Sustainable Environment and Economy

Report Author: Rachel Thatcher, Sustainability Officer
Hayley Briggs, Sustainability Officer
Daniel McCoy, Sustainability Officer (Utilities)

5

File No: I2023/877

Summary:

This report will provide general information updates on current and upcoming Sustainability projects. For this CCRRAC reporting period, this report will include the following updates:

10

- SunSPOT wrap-up
- Essential Energy electric vehicle charging infrastructure trial
- Upcoming exhibition – ‘*Mending and Tending: Art that works for Nature*’
- Utilities energy efficiency optimisation

15

RECOMMENDATION:

That the Climate Change and Resource Recovery Advisory Committee notes the report.

20

Report

SunSPOT

5 In 2019 Council partnered with SunSPOT, a solar mapping program built by not-for-profit solar research organisation The Australian Photovoltaic Institute (APVI) at the University of New South Wales (UNSW). SunSPOT allows users to assess their suitability, cost, payback period, and savings from solar panels and batteries based on extensive weather and 3D spatial mapping data, in a way that is easy to understand (Image 1).

10 Council currently has a subscription with SunSPOT which allows Byron Shire users to access the Premium version of the program, requiring less input from users and more specific results due to more detailed LiDAR (aerial laser mapping) data compared with the free version. The subscription also gives Council access to a dashboard which gives detailed information on SunSPOT usage and solar statistics in the LGA, such as number of solar installations, system sizes, and locations (Image 2). The free version of SunSPOT is of no cost to Councils, however the dashboard function is not included and the program

15 requires more detailed input from users to determine results.

Image 1. Example results from user input

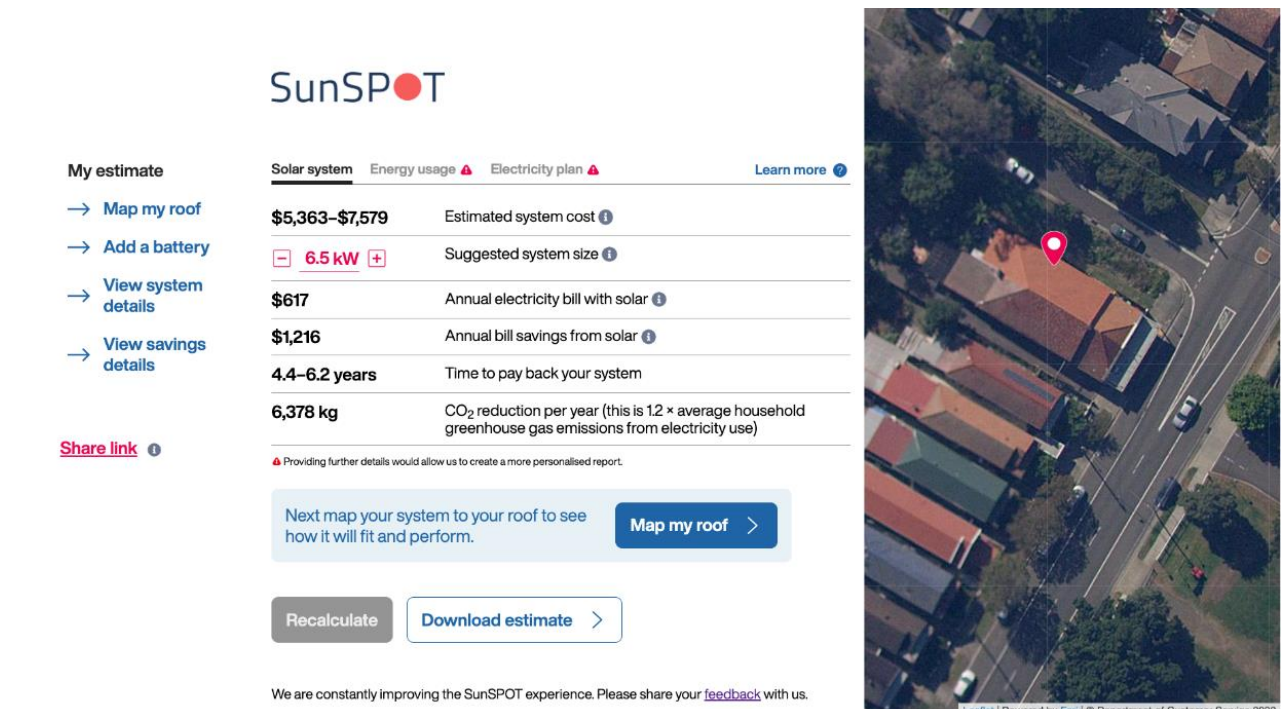
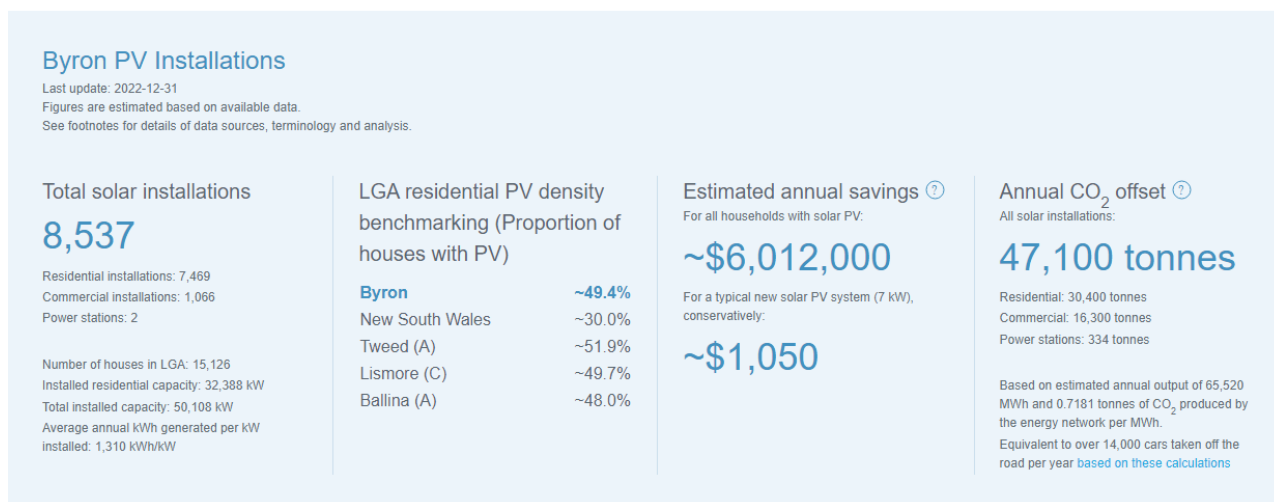


Image 2. SunSPOT Dashboard



5 The cost of the three-year subscription was \$4290 and it is due to end in August 2023. The costs have since increased slightly and there is now an additional option to subscribe to the dashboard only on an annual basis (see Table 1).

Table 1. SunSPOT subscription options.

Subscription Option	Cost
Annual SunSPOT subscription	\$1650
Three-year SunSPOT subscription	\$4950
Dashboard only (annual)	\$660

Council is supportive of SunSPOT however at present, staff do not recommend re-subscribing due to the low uptake of the program in the three years since Council has been subscribed, despite media and communications efforts.

10 In addition, community members will still have access to SunSPOT for free, however Council will no longer have access to the dashboard. Should staff decide in the future that either the dashboard statistics or a premium version of SunSPOT be necessary, they will be able to re-subscribe at any point. Staff have saved records from the dashboard of solar uptake in the LGA from 2001-2022 for future reference if needed.

To explore SunSPOT or the dashboard before Council's subscription ends in August 2023, please use the following links:

Dashboard -

https://pv-map.apvi.org.au/council/dashboard/_Tyu9oZsL3qZJnPI9t0Lfg

5 SunSPOT –

[Solar and battery calculator](#) | [Solar Savings](#) | [SunSPOT, Australia](#)

Essential Energy Electric Vehicle Charging Infrastructure Trial

10 Byron Bay is recognized within the NSW Climate and Energy Action Master Plan as having the highest demand for future electric vehicle (EV) infrastructure in the region, and as a result Council has been offered the opportunity to participate in the State Government EVX pole charger trial funded by Essential Energy.

15 Council has recently endorsed the use of two parking bays in the Byron Bay area (exact locations to be confirmed) for the trial, whereby an Essential Energy power pole will be used to house the EV charging infrastructure. The parking spaces will be in the paid parking zone however will be free of charge for electric vehicles to encourage uptake of the trial.

20 At this time the trial will include one dual 22kW EVX slow charger which will enable two cars to charge simultaneously. A slow charger is intended for 'top up' charging only to encourage multiple vehicles per day to access the charging infrastructure (normal Byron Bay CBD parking time limits will be enforced). The charger is due to be installed in June 2023 and will run until 2026 with the option to continue indefinitely if deemed successful.

Image 3. EVX pole charger in Glebe, Sydney



25

Climate Conversations

5 Council is opening up the conversation on climate adaptation with the community. Climate Conversations is a new creative initiative that invites the community to collaborate with local artists and explore ways we can adapt, evolve, and build resilience in the face of climate change through the arts. The theme for the inaugural Climate Conversations is 'Adaptation'.

10 Local artists Samantha Moss, Jess Poulsen and Shona Wilson have been commissioned by Council for their collaborative project titled *'Mending and Tending: Art that works for Nature'*. The artists will present their ephemeral works as part of an interactive exhibition at Byron Bay's Lone Goat Gallery from 28th July – 26th August 2023, with community workshops also being held at Torakina Nature Reserve in Brunswick Heads.

For more information on this project head to the Lone Goat Gallery website: [SAMANTHA MOSS, JESS POULSEN & SHONA WILSON - Exhibitions - Lone Goat Gallery](#)

15 **Utilities Energy Efficiency Optimisation**

Over the past decade Utilities have undertaken many energy efficiency upgrades and programs to improve the energy efficiency of the BSC waste water network. These upgrades have produced verifiable annual savings for Council of over 1GWh or \$250,000pa. They have included:

- 20 • the installation of solar PV farms at three Sewage Treatment Plants (STPs) with a combined capacity of 303kW
- upgrading to energy efficient blowers at Byron STP,
- energy efficiency upgrades to the sewer pump station (SPS) network, and
- the creation of the position of Sustainability Officer Utilities (SOU).

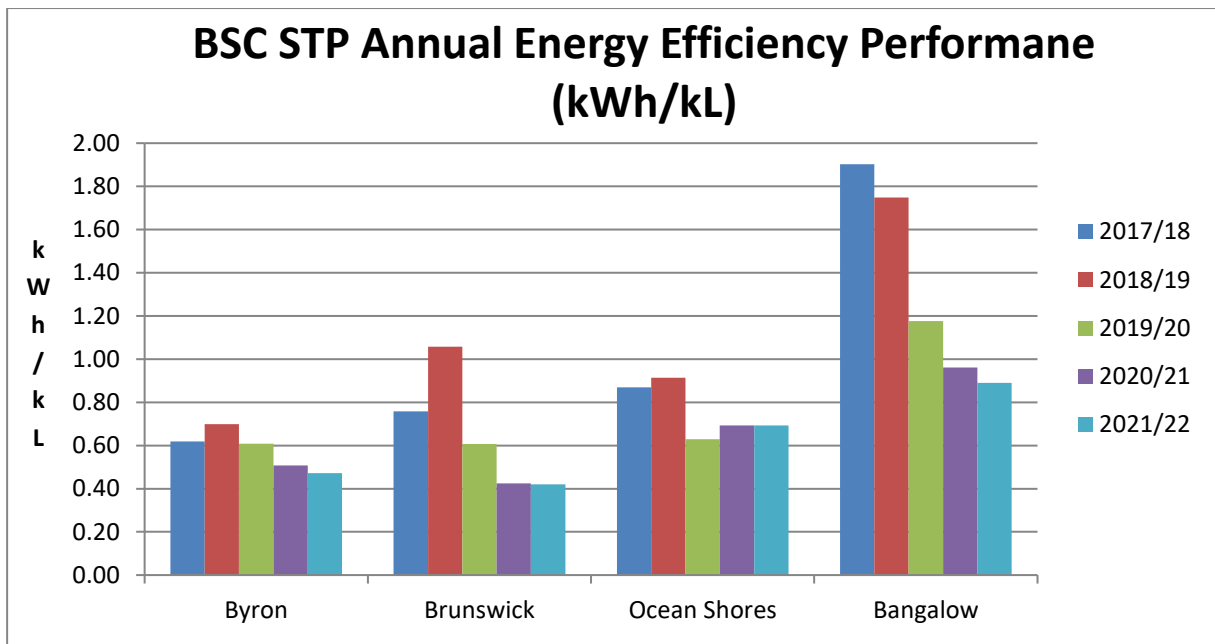
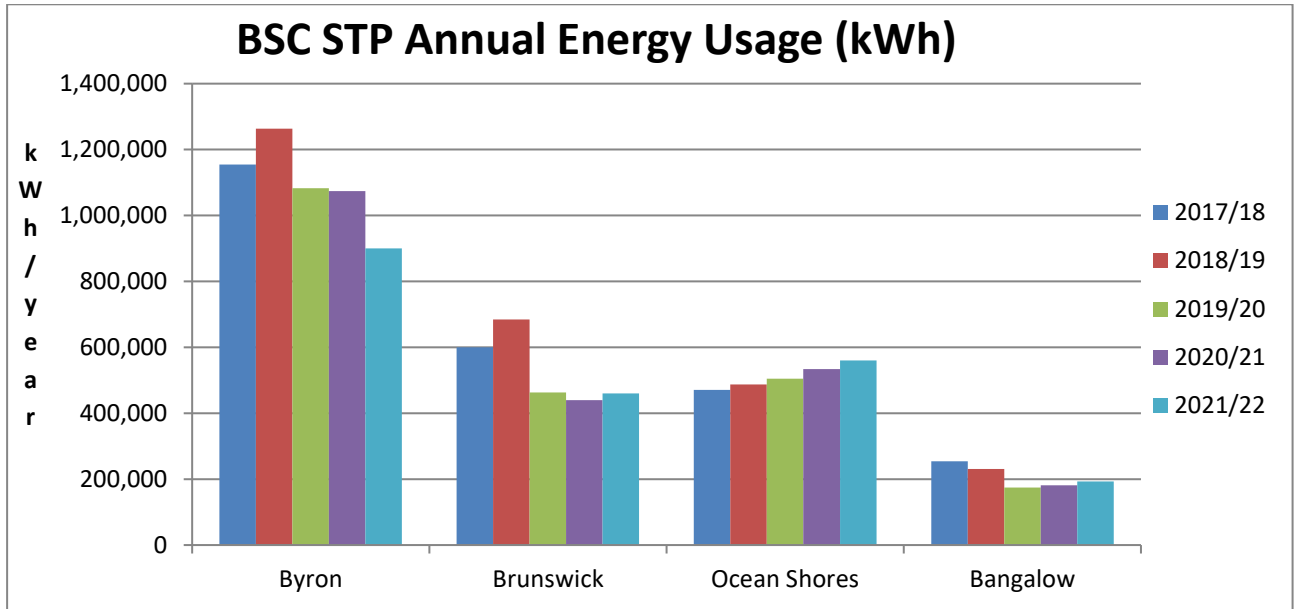
25 The SOU has been tasked with developing systems for quantifying and reporting on energy savings as well as identifying and prioritising sites for assessment and upgrade.

Utilities Energy Performance Metrics

30 In order to assess an assets energy efficiency, while taking into account load variations due to population fluctuations and weather variability, the SOU has utilised a kWh/kL energy performance metric. This metric can be used to both identify inefficiency and anomalies as well as verify the benefits of energy efficiency upgrades that have been undertaken.

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The kWh/kL energy performance metric has been applied to Councils STPs for the last several years. The graphs below show the last four financial years electricity usage (Figure 1) and kWh/kL energy performance metric (Figure 2) for each of councils STPs.

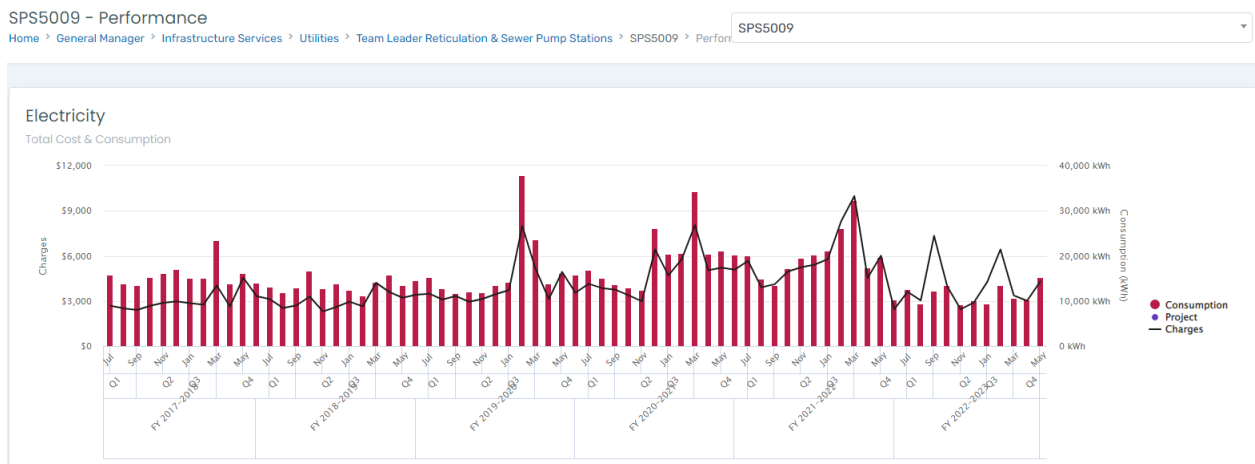


5

The above graphs communicate the benefits of the energy upgrades works at Byron, Brunswick and Bangalow since 2019 while showing that Ocean Shores has been steadily losing efficiency. The economies of scale energy efficiency benefits of larger plants can be seen by the poor Bangalow kWh/kL. Bigger plants can generally handle more volume with less energy.

10

The benefits of generating the above data sets as an efficiency tracking and anomaly diagnostic tool has motivated their use on other Utilities assets. As a test the energy performance metric was applied to SPS5009, the large sewer pump at Kiah Close Ocean Shores. SPS5009, which is one of the largest sewer pump stations in Byron’s sewer network, had a jockey pump installed in 2015 to handle Average Dry Weather Flow (ADWF) conditions while leaving the larger pumps in reserve for heavy rain events. When the SOU ran energy performance metrics over the site data it became apparent that site energy efficiency was declining. This prompted the removal and servicing of the jockey pump which was reinstalled in May 2022. The graph below shows that when operating per design the jockey pump energy usage is halved, saving council around \$50,000pa on electricity charges alone.



Encouraged by the realised benefits explained above the SOU and the Utilities Data Analytics Officer are in the process of embedding rolling energy performance metrics for sewer pump stations (SPS) into Utilities data management systems.

West Byron STP (WBSTP) Blower Upgrades Energy Savings Energy Savings

Approximately 40-50% of the energy consumption at an STP is due to blowers. Blowers aerate the sewage to provide oxygen to the bugs in the bioreactor and are also used in the aerobic digester to assist in the dewatering process. The blowers on both the bioreactor and the aerobic digester at WBSTP are being upgraded to Turbo-blowers. So far, three Turbo-blowers have been installed with the first installation occurring in October 2020. Significant energy savings have been achieved as each blower has come online. Sitewide electricity usage has been reducing approximately 50,00kWh each year since the Turbo-blower upgrades commenced. It is estimated that after the final unit is installed and the blowers are commissioned/tuned that the sitewide savings due to this project will be 200-300MWh per year or 20-30% of site electricity consumption/cost.

The NSW Government Energy Savings Scheme (ESS) is offering Energy Savings Certificates (ESC’s) for significant energy efficiency capex projects on council assets. The SOU is currently engaging consultants to generate ESCs for the Turbo-blower upgrades

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and it is estimated the net revenue to council will be approximately \$30,000. Moving forward all major Utilities energy efficiency upgrades capex projects will be assessed for ESC eligibility.

5

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
<p>3: Nurtured Environment We nurture and enhance the natural environment</p>	<p>3.2: Deliver initiatives and education programs to encourage protection of our environment</p>	<p>3.2.4: Sustainability projects - Support community led environmental and sustainability projects</p>	<p>3.2.4.1</p>	<p>Promote Sunspot tool in collaboration with Zero Emissions Byron</p>
<p>3: Nurtured Environment We nurture and enhance the natural environment</p>	<p>3.4: Support and empower our community to adapt to, and mitigate our impact on climate change</p>	<p>3.4.3: Monitoring and reporting - Monitor and report on actions that aim to address climate change</p>	<p>3.4.3.4</p>	<p>Implement Utilities energy optimisation system.</p>
<p>3: Nurtured Environment We nurture and enhance the natural environment</p>	<p>3.4: Support and empower our community to adapt to, and mitigate our impact on climate change</p>	<p>3.4.4: Net Zero - Work towards achieving Council's 100% net zero-emissions target</p>	<p>3.4.4.2</p>	<p>Participate in regional sustainability working groups and initiatives.</p>

Legal/Statutory/Policy Considerations

N/A

Financial Considerations

N/A

5 Consultation and Engagement

The Essential Energy EV charging infrastructure trial is being facilitated by the Infrastructure Services team in consultation with the Sustainability Team. Consultation took place prior to approval and further engagement will take place once the project commences.

- 10 The Climate Conversations art exhibition is a collaborative project between the Arts and Culture Team, local community artists, and the Sustainability Team. Consultation and engagement between all parties is regular and ongoing.

Utilities energy efficiency optimisation projects are implemented by the Utilities Team with regular consultation and engagement with the Sustainability Team.

15

**Report No. 4.5 Climate Change Risk and Adaptation:
Council Project Update**

Directorate: Sustainable Environment and Economy

Report Author: Julia Adams, Sustainability Team Leader

5 **File No:** I2023/419

Summary:

10 Council recognises that responding to climate change involves decision-making in both the mitigation and adaptation spaces. We have been strategically addressing climate change since 2004, and in October 2018, became the first council in NSW to declare a climate emergency.

15 This report presents the Climate Change and Resource Recovery Advisory Committee with a high-level update on what Council is doing in the space of climate adaptation, and some examples of specific projects have been progressed this financial year.

RECOMMENDATION:

20 **That the Climate Change and Resource Recovery Advisory Committee notes the report.**

Report

Background

In 2018, Council declared a climate emergency (Res 18-680). In 2019, it was decided that a Climate Action Tank would be delivered to advance the development of a [Climate Change Adaptation Plan](#). Unfortunately, due to COVID-19 this was unable to go ahead, however in June 2020, Council resolved (Res 20-351) to develop a Climate Change Adaptation Plan (CCAP) in-house.

The resolution to develop a CCAP in-house coincided with the undertaking of an operational Climate Change Risk Assessment with Council’s insurer, Statewide Mutual. In 2021, seven workshops were held involving over 20 cross-directorate staff to identify the key climate risks for Byron Shire. A comprehensive list of adaptation initiatives was developed in response to the identified climate risks for Byron Shire. Initiatives identified as High or Extreme were then used as the basis of Council’s CCAP Actions.

The CCAP forms the basis of climate adaptation within Council’s operations.

Climate Change Risk Assessment

In 2020-2021, Council staff completed a Climate Change Risk Assessment with Council’s insurer, Statewide Mutual. Four initial workshops were held and attended by staff from each directorate. The results of this risk assessment were reported to the Executive Team and the Sustainability and Emissions Reduction Advisory Committee in December and November 2020, respectively.

Staff identified 71 climate risks to the organisation under six different climate risk scenarios (see table 1 for details of risk assessment).

Table 1 - Impact Rankings by Scenario								All Impacts Total
	Temperature	Hot Days	Rain	Fire Weather	Sea Level	Rain Intensity		
Low	0	3	0	3	1	0	Low	7
Medium	4	3	5	3	4	11	Medium	30
High	4	3	3	7	7	9	High	33
Extreme	0	0	0	0	1	0	Extreme	1
	8	9	8	13	13	20	71	71

The climate scenarios used to identify and assess the risks were:

- Increase in average temperature,
- Increase in average number of hot days per year,
- Increase in average annual rainfall,

- Increase in risk of fire weather, according to the Forest Fire Danger Index,
- Increase in sea level,
- Increase in periods of intense rain/severe storms

In addition to this staff identified two major overarching risks:

- 5
- Risk of Council not being able to meet the community's expectations in relation to its response and adaptation plans for each of the identified climate change scenario risks, and
 - The risk that Council will not have the financial capacity to fund the works required in the future, including: the development of identified strategies, and in managing
- 10
- the community expectations associated with the impacts of the climate change scenarios.

Following the identification and classification of the risks, an additional three internal workshops were held to identify controls and adaptation initiatives required to mitigate the previously workshopped climate risks.

- 15
- The outcome was a comprehensive list of feasible actions within Council's operational control that could be used as the basis of a CCAP.

- 20
- Risks identified in the risk assessment process were categorised into low, medium, high, or extreme, however only risks identified as high or extreme were prioritised for inclusion in the CCAP. The remaining low to medium risks will be considered in future 5-year reviews of the CCAP and the Climate Change Risk Assessment.

Climate Change Adaptation Plan

Our [Climate Change Adaptation Plan](#) is a five-year plan aimed at reducing the risk of climate impacts through actions within Council's control and enhancing community resilience and ability to adapt before, during, and after climate events.

- 25
- The plan includes 100 Adaptation Actions addressing the four climate scenarios identified as the most significant risks to Byron Shire:
- flooding due to extreme rainfall,
 - coastal storm surges due to severe storms and sea level rise,
 - extreme heat, and
- 30
- increased fire weather.

As part of the development of the CCAP, it was sent to 12 groups and individuals for peer review and feedback. We were lucky enough to draw on the expertise of many talented local residents who work in the climate change science and communication space.

The peer review process was highly valuable in developing a thorough, well considered Plan and many key improvements were achieved through this process.

Climate Adaptation in Council Operations

5 Staff are working to implement the actions from the CCAP by incorporating them into Council's annual Operational Plan. There are numerous adaptation actions that are being progressed across all three directorates this financial year. In summary, the following areas are being focused on by staff:

Climate risk

- 10
- Staff are reviewing the existing assessment in order to embed it into enterprise risk management plans and processes with the risk team.

Urban cooling

- 15
- This is CCAP Action 62 and addresses climate risks associated increased annual temperature and increasing number of hot days, i.e. heatwaves. Staff have been working collaboratively to identify the scope for a plan and will be reporting on this project in more detail at the next Climate Change and Resource Recovery Advisory Committee meeting.

Climate Conversations exhibition – Mending & Tending: Art that works for Nature

- 20
- This inaugural project draws upon the arts to address the theme of *Adaptation*, through a community-driven exploration of the ways in which we can adapt and evolve in the face of climate change. Council seeks to create space for our community to discuss climate adaptation and consider it within the context of their individual lives and wider communities.
 - The exhibition is a commissioned project by local artists, Samantha Moss, Jess Poulsen and Shona Wilson.
 - The community will be able to engage with this interactive project based over two sites – an exhibition of ephemeral works at the Lone Goat Gallery and events held at Torakina Nature Reserve, Brunswick Heads.
 - The exhibition and workshops will be on from 29 July – 26 August 2023, with the opening event to be held on Friday 28 July 5-7pm. An invitation and detailed program will soon be shared with all members of the Climate Change and Resource Recovery Advisory Committee.
- 30

Climate Adaptation across council operations

- 35
- Disaster recovery – support recovery following the 2022 flood events.
 - Disaster preparedness – support and coordinate disaster prevention, preparedness, response and recovery activities.
 - Native species – use best practice land management to improve ecological resilience and reduce threats to biodiversity.

- Environmental planning – plan to improve the quality of the natural environment, e.g. identifying priority open forest ecosystems requiring restoration through the reintroduction of fire.
- 5 • Future infrastructure needs – plan for the infrastructure needs of the current and future population, and provide stormwater infrastructure to manage flood mitigation and improve social and environmental outcomes e.g. 10 year flood and drainage renewal and upgrade program.
- Floodplain management – mitigate the impact of flooding on private and public property.
- 10 • Emergency management and response – support and participate in local emergency management, e.g. Byron flood warning network.
- Coastal Management Program planning and implementation, e.g. identifying coastal risks, and risks to cultural and ecological values and assets.
- 15 • Aboriginal community and First Nations People – develop strong and productive relationships that empower the Aboriginal community

Strategic Considerations

Community Strategic Plan and Operational Plan

CSP Objective	CSP Strategy	DP Action	Code	OP Activity
3: Nurtured Environment We nurture and enhance the natural environment	3.4: Support and empower our community to adapt to, and mitigate our impact on climate change	3.4.2: Climate change adaptation - Enhance community resilience and ability to adapt before, during, and after climate events	3.4.2.1	Review Climate Change Risk Assessment
3: Nurtured Environment We nurture and enhance the natural environment	3.4: Support and empower our community to adapt to, and mitigate our impact on climate change	3.4.2: Climate change adaptation - Enhance community resilience and ability to adapt before, during, and after climate events	3.4.2.2	Scope the development of an Urban Cooling Strategy (CCAP Action 62)

<p align="center">3: Nurtured Environment We nurture and enhance the natural environment</p>	<p align="center">3.2: Deliver initiatives and education programs to encourage protection of our environment</p>	<p align="center">3.2.2: Environmental education and awareness - Coordinate and support environmental education to the community</p>	<p align="center">3.2.2.4</p>	<p align="center">Deliver Climate Conversations Project in collaboration with Lone Goat Gallery</p>
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Recent Resolutions

- Resolution 18-680
- Resolution 20-351
- Resolution 21-282

5 Legal/Statutory/Policy Considerations

Byron Shire Council Climate Change Adaptation Plan

Financial Considerations

10 This is only an update report. Adaptation actions from the CCAP are considered annually for the Operational Plan (OP) and resourced accordingly by the responsible Directorate. Grant funding is also often sought out to assist in the implementation of the actions.